

ESTTA Tracking number: **ESTTA186587**

Filing date: **01/15/2008**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE TRADEMARK TRIAL AND APPEAL BOARD

## Notice of Opposition

Notice is hereby given that the following party opposes registration of the indicated application.

### Opposer Information

Name	Nabaltec AG
Granted to Date of previous extension	01/16/2008
Address	Alustrasse 50-52 92421 Schwandorf, GERMANY

Domestic Representative	Katrin Lewertoff and Leslie K. Mitchell Arent Fox LLP 1675 Broadway New York, NY 10019 UNITED STATES lewertoff.katrin@arentfox.com, mitchell.leslie@arentfox.com, nyipdocket@arentfox.com Phone:212 484 3900
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### Applicant Information

Application No	79028600	Publication date	09/18/2007
Opposition Filing Date	01/15/2008	Opposition Period Ends	01/16/2008
International Registration No.	0897847	International Registration Date	03/31/2006
Applicant	Huntsman Advanced Materials (Switzerland) GmbH Klybeckstrasse 200 CH-4057 Basel  SWITZERLAND		

### Goods/Services Affected by Opposition

<p>Class 001.</p> <p>All goods and services in the class are opposed, namely: Chemicals for use in industry; unprocessed resins used as raw materials in solid or liquid form; polymer base compositions used in the manufacture of commercial and industrial goods; polymer base compositions used in the manufacture of electronics, composites and in the aerospace industry; unprocessed polymer base beads used in the manufacturing of commercial and industrial goods and in the aerospace industry; unprocessed benzoxazine chemicals for use in industry; unprocessed base polystyrene resins including or namely foam and styrene monomers</p>
<p>Class 017.</p> <p>All goods and services in the class are opposed, namely: Plastics in extruded form for general industrial use; plastics in extruded form for use in manufacturing; commercial packing material and insulating material, namely, non-metal hoses, laminates namely foil consisting primarily of plastic with or without a metal layer for application to a substrate and fiber laminates for wrapping conduits and cable trays; benzoxazine as semi-manufactured products, namely rubber, composites in the form of profiles, boards, sheets, rods, powder, and pellets for use in manufacturing, and molded foam</p>

insulated container packing for commercial use; flexible non-metal pipes
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## Grounds for Opposition

Priority and likelihood of confusion	Trademark Act section 2(d)
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## Mark Cited by Opposer as Basis for Opposition

U.S. Registration No.	2484520	Application Date	11/24/1999
Registration Date	09/04/2001	Foreign Priority Date	NONE
Word Mark	APYRAL		
Design Mark			
Description of Mark	NONE		
Goods/Services	Class 001. First use: chemicals, namely aluminum hydroxide, not including binders for lacquers, for use in the manufacture of carpets, floor coverings, and building materials such as heat relief material, roof coatings, and roof insulation; and chemicals, namely aluminum hydroxide, not including binders for lacquers, for the use in the chemical, rubber, plastic and polyurethane processing, cable, paper, plastic and ceramic industries		

Attachments	75857102#TMSN.gif ( 1 page )( bytes ) 030021.5 notice of opposition.pdf ( 21 pages )(1647284 bytes )
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## Certificate of Service

The undersigned hereby certifies that a copy of this paper has been served upon all parties, at their address record by First Class Mail on this date.

Signature	/Katrin Lewertoff/
Name	Katrin Lewertoff
Date	01/15/2008

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE TRADEMARK TRIAL AND APPEAL BOARD**

**IN THE MATTER OF APPLICATION**

Mark: AZYRAL  
Applicant: Huntsman Advanced Materials (Switzerland) GmbH  
Serial No.: 79/028,600  
Published in the  
*Official Gazette:* September 18, 2007

NABALTEC AG,	)	
	)	
Opposer,	)	
	)	
v.	)	Opposition No.
	)	
HUNTSMAN ADVANCED MATERIALS	)	
(SWITZERLAND) GMBH,	)	
	)	
Applicant.	)	
	)	

**NOTICE OF OPPOSITION**

This Notice of Opposition is brought in the matter of pending trademark application Serial No. 79/028,600, filed March 31, 2006, by Huntsman Advanced Materials (Switzerland) GmbH (hereinafter "Applicant"), for the registration of the trademark AZYRAL (hereinafter "Applicant's Mark") covering "chemicals for use in industry; unprocessed resins used as raw materials in solid or liquid form; polymer base compositions used in the manufacture of commercial and industrial goods; polymer base compositions used in the manufacture of electronics, composites and in the aerospace industry; unprocessed polymer base beads used in the manufacturing of commercial and industrial goods and in the aerospace industry; unprocessed benzoxazine chemicals for use in industry; unprocessed base polystyrene resins including or namely foam and styrene monomers" in Class 1 and "plastics in extruded form for

general industrial use; plastics in extruded form for use in manufacturing; commercial packing material and insulating material, namely, non-metal hoses, laminates namely foil consisting primarily of plastic with or without a metal layer for application to a substrate and fiber laminates for wrapping conduits and cable trays; benzoxazine as semi-manufactured products, namely rubber, composites in the form of profiles, boards, sheets, rods, powder, and pellets for use in manufacturing, and molded foam insulated container packing for commercial use; flexible non-metal pipes” in Class 17. The application was published in the Official Gazette on September 18, 2007. Opposer Nabaltec AG (hereinafter “Opposer”), whose address is Alustr. 50-52, 92421 Schwandorf, Germany believes it will be damaged by the registration of such trademark in Classes 1 and 17 and hereby opposes same.

The grounds for opposition are as follows:

1. Under the trademark and trade name APYRAL Opposer has engaged in the business of selling chemicals since long prior to Applicant’s filing date of March 31, 2006. Opposer has continuously used its mark in commerce and has not abandoned use of its mark.
2. Opposer has secured valuable rights in the mark APYRAL based on use in U.S. commerce and registration.
3. Opposer is the owner of the following trademark registration for APYRAL in the United States Patent and Trademark Office (“USPTO”), which is currently in full force and effect: Incontestable U.S. Registration No. 2,484,520 duly and legally issued on September 4, 2001 on the Principal Register of the Patent and Trademark Office for the mark APYRAL (International Class 1) as applied to “chemicals, namely aluminum hydroxide, not including binders for lacquers, for use in the manufacture of carpets, floor coverings, and building materials such as heat relief material, roof coatings, and roof insulation; and chemicals, namely

aluminum hydroxide, not including binders for lacquers, for the use in the chemical, rubber, plastic and polyurethane processing, cable, paper, plastic and ceramic industries.” Said registration is the exclusive property of Opposer and is in all respects valid, subsisting and in full force and effect, a printout of which from the USPTO website is attached as Exhibit 1. A certified copy of the referenced registration will be submitted during Opposer’s testimony period.

4. Opposer has expended, and continues to expend significant amounts of money, time and effort in advertising, promoting and popularizing its APYRAL trademark so that the trade in general, and the consuming public in particular, have come to know and recognize Opposer’s trademark and products, and to know that the same originate with, and belong to, Opposer.

5. Opposer’s mark APYRAL is arbitrary as applied to Opposer’s goods. The mark is thus highly distinctive and serves as a strong indicator of origin.

6. As a consequence of Opposer’s continuous and widespread use since at least September 4, 2001, the promotion and advertising of the mark APYRAL, Opposer has acquired substantial and protectable goodwill in such mark in the United States. The mark has been used for and on Opposer’s products for a significant period of time and is therefore instantly recognized by consumers as a symbol of the quality of Opposer’s goods.

7. There is no issue of priority since Opposer’s first use (and registration) of its mark precedes Applicant’s filing date.

8. Applicant’s AZYRAL and Opposer’s APYRAL are substantially identical the only distinction between them being the Z in Applicant’s mark and P in Opposer’s mark.

9. The goods for which Applicant seeks registration of the AZYRAL mark are highly similar to the goods for which and in connection with which Opposer's APYRAL mark has been used for many years. The goods marketed by Opposer are sold to the same consumers, and are thus in competition with the goods to be marketed and sold by Applicant. In addition, The chemical products sold by Opposer and the goods covered by Applicant's mark may be used in the manufacture of identical goods. Opposer encloses herewith printouts from Opposer's and Applicant's websites, [www.nabaltec.de](http://www.nabaltec.de) and [www.huntsman.com](http://www.huntsman.com), respectively, as Exhibits 2 and 3 evidencing the high similarity of the goods.

10. Applicant's mark is confusingly and deceptively similar to Opposer's mark and is likely to cause confusion and mistake in the minds of the purchasing public and to deceive the purchasing public as to the source or origin of Applicant's goods. Persons familiar with Opposer's trademark would be likely to believe that Applicant's goods originate with or are sponsored by Opposer. Any such confusion in the trade could seriously injure Opposer to the extent that any defect, objection or fault found with Applicant's goods marketed under its mark would necessarily reflect upon the reputation which the Opposer has established for its products offered and merchandised under its mark.

11. If the Applicant were granted registration for the subject mark it would thereby obtain at least a *prima facie* exclusive right to the use of its mark on the goods listed in the published application. Such registration and use would be a source of damage and injury to Opposer.

12. Based on the foregoing, Opposer believes that it will be damaged by the registration of Applicant's Mark.

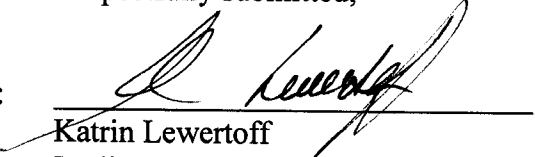
WHEREFORE, Opposer respectfully requests that the registration sought by Applicant be refused and that this Opposition be sustained.

Opposer herein appoints Katrin Lewertoff and Leslie K. Mitchell as its attorneys, to transact all business in the United States Patent and Trademark office relating to this matter with full power of substitution.

Respectfully submitted,

Date: January 15, 2008

By:

  
Katrin Lewertoff  
Leslie K. Mitchell  
Arent Fox LLP  
1675 Broadway  
New York, New York 10019  
(212) 484-3900


Attorneys for Opposer,  
NABALTEC AG

**CERTIFICATE OF SERVICE**

I hereby certify that a copy of the foregoing, **Notice of Opposition Under 37 CFR § 2.104(a)**, was served on Applicant via First Class Mail, postage pre-paid addressed to:

Julie A. Katz  
Welch & Katz, Ltd.  
22nd Floor  
120 S. Riverside Plaza  
Chicago, IL 60606

Date: January 15, 2008

  
Patricia Schaefer

# EXHIBIT 1



**Thank you for your request. Here are the latest results from the TARR web server.**

**This page was generated by the TARR system on 2008-01-07 15:30:58 ET**

**Serial Number:** 75857102 Assignment Information      Trademark Document Retrieval

**Registration Number:** 2484520

**Mark (words only):** APYRAL

**Standard Character claim:** No

**Current Status:** Section 8 and 15 affidavits have been accepted and acknowledged.

**Date of Status:** 2006-11-02

**Filing Date:** 1999-11-24

**Transformed into a National Application:** No

**Registration Date:** 2001-09-04

**Register:** Principal

**Law Office Assigned:** LAW OFFICE 115

**If you are the applicant or applicant's attorney and have questions about this file, please contact the Trademark Assistance Center at [TrademarkAssistanceCenter@uspto.gov](mailto:TrademarkAssistanceCenter@uspto.gov)**

**Current Location:** 40S -Scanning On Demand

**Date In Location:** 2007-01-31

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#### LAST APPLICANT(S)/OWNER(S) OF RECORD

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1. Nabaltec GmbH

**Address:**

Nabaltec GmbH  
Alustrasse 50-52  
92421 Schwandorf  
Fed Rep Germany

**Legal Entity Type:** Corporation

**State or Country of Incorporation:** Fed Rep Germany

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#### GOODS AND/OR SERVICES

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**International Class:** 001

**Class Status:** Active

chemicals, namely aluminum hydroxide, not including binders for lacquers, for use in the manufacture of carpets, floor coverings, and building materials such as heat relief material, roof coatings, and roof insulation; and chemicals, namely aluminum hydroxide, not including binders for lacquers, for the use in the chemical,

rubber, plastic and polyurethane processing, cable, paper, plastic and ceramic industries

**Basis:** 44(e)

**First Use Date:** (DATE NOT AVAILABLE)

**First Use in Commerce Date:** (DATE NOT AVAILABLE)

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#### ADDITIONAL INFORMATION

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**Foreign Registration Number:** 988976

**Foreign Registration Date:** 1979-08-13

**Country:** Fed Rep Germany

**Foreign Expiration Date:** 2008-09-30

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#### MADRID PROTOCOL INFORMATION

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(NOT AVAILABLE)

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#### PROSECUTION HISTORY

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**NOTE: To view any document referenced below, click on the link to "Trademark Document Retrieval" shown near the top of this page.**

2007-01-31 - Case File In TICRS

2006-11-02 - Section 8 (6-year) accepted & Section 15 acknowledged

2006-10-26 - Assigned To Paralegal

2006-09-18 - Section 8 (6-year) and Section 15 Filed

2006-09-18 - TEAS Section 8 & 15 Received

2001-09-04 - Registered - Principal Register

2001-06-12 - Published for opposition

2001-05-30 - Notice of publication

2001-04-12 - Approved for Pub - Principal Register (Initial exam)

2001-03-15 - Examiner's amendment mailed

2000-10-18 - Communication received from applicant

2000-04-19 - Non-final action mailed

2000-04-18 - Assigned To Examiner

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#### ATTORNEY/CORRESPONDENT INFORMATION

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**Attorney of Record**

W. R. Duke Taylor

**Correspondent**

W. R. DUKE TAYLOR

HARNESS, DICKEY & PIERCE, P.L.C.

P.O. BOX 828

BLOOMFIELD HILLS, MICHIGAN 48303

**Domestic Representative**

W. R. Duke Taylor

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## EXHIBIT 2



## General Information

APYRAL® products have a very high chemical purity of at least 99.5 %. The remaining constituents consist mainly of sodium oxide, which is part of the crystal lattice and partly adhering to the APYRAL® surface in hydrated form, as well as traces of iron and silicon compounds.

Aluminium hydroxide is non-soluble in water with amphoteric characteristics. Due to the sodium oxide components, a watery APYRAL® suspension has a pH value of 8-9. This must be taken into consideration in watery or other alkali-sensitive solvents or dispersions – particularly where other additives are used, which are restricted in use to a certain pH range. In case of doubt, tests must be made for possible interactions.

In many applications APYRAL® is not only used as flame retardant, but does also fulfil a function as white pigment. Due to its whiteness, APYRAL® behaves neutral to the colouring of polymers.

The Mohs hardness of 2.5 - 3 causes no problems even in highly filled molten masses. The relatively high heat capacity cp of 1.65 J/gK at 400°K (127°C) has a beneficial effect on the dimensional stability under heat for APYRAL® filled polymers. This even has priority in some applications.

With a specific density of 2.4 g/cm<sup>3</sup>, APYRAL® is a medium-density mineral filler. As a result of the required filling levels, the density of the flame-retarded plastics is increased compared with the unfilled polymer. In total, however, APYRAL® is one of the most attractive flame retardants, even on the basis of a volume-specific cost balance.

➤ APPLICATION  
➤ FLAME RETARDANCY

## General Information

Flame Retardancy Mechanism  
Processing Temperatures  
Flammability  
Smoke Density  
Cone Calorimeter

## Product Recommendation

Coatings

BMC

Carpet backing

Dispersions

Conveyerbelt

Foils / Tarpaulins

Cast Resins

Hand lay-up

Isolation Foams

Cable Compounds

Adhesives

Electrical Insulators

Printed Circuit Boards

Profiles / Hoses

Pultrusion

PUR-Foams

RTM

SMC

➤ Disclaimer    ➤ Imprint

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## Flame retardancy

PRINT

Flame retardants on the basis of metal hydrates, in particular aluminium and magnesium hydroxide, have established themselves over the years as by far the most important fire retardants.

Of all flame retardants, the metal hydrates have experienced the highest rate of growth over recent years.

In particular their environment friendliness and their favourable price-performance ratio make **APYRAL®**, aluminium hydroxide, **APYRAL® AOH**, aluminium oxide hydrate and **APYMAG®**, magnesium hydroxide, important flame retardants.

**APYRAL®****Produkt-/Product-Information****APYRAL 60D, APYRAL 120E****Nabaltec****Mineralische Flammenschutzmittel für****Mineral flame retardants for**

- **Kabelindustrie / Wire and cable industry**
- **Bauindustrie / Construction industry**
- **Fahrzeugbau / Public transport**

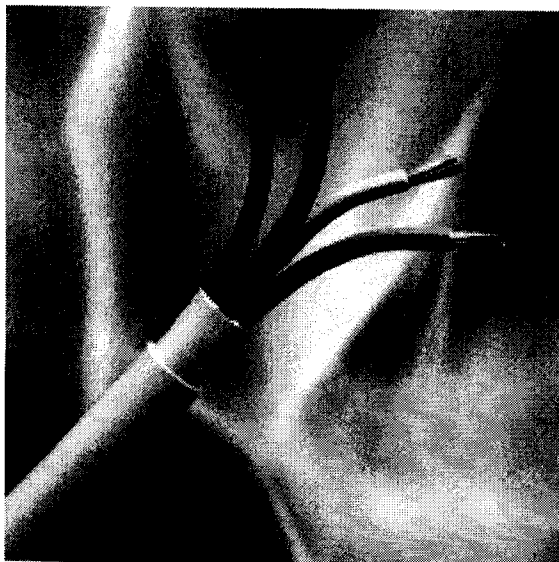
<b>Durchschnittsanalyse / Typical analysis</b>		<b>APYRAL 60D</b>	<b>APYRAL 120E</b>
Al (OH) <sub>3</sub> - Gehalt / -Content	[%]	99.5	99.5
Feuchte / Moisture	[%]	0.3	0.5
Glühverlust / Loss on ignition	[%]	34.6	34.6
<b>Teilchengröße / Particle size</b>			
(Laserbeugung) / (Laser diffraction)			
	D <sub>10</sub> [µm]	0.5	0.4
	D <sub>50</sub> [µm]	1.0	0.9
	D <sub>90</sub> [µm]	2.3	2.9
<b>Siebückstand / Sieve analysis</b>			
(> 45 µm)			
	[%]	0.02	0.03
<b>Spezifische Oberfläche / Specific surface area</b>			
(BET)			
	[m <sup>2</sup> /g]	6	11
<b>Schüttdichte / Bulk density</b>			
	[kg/m <sup>3</sup> ]	350	200
<b>Ölaufnahme / Oil absorption</b>			
	[ml/100g]	33	37
<b>Weißgrad / Whiteness</b>			
(Elrepho 457 nm)			
	[%]	98	98
<b>Spezifische Leitfähigkeit / Specific conductivity</b>			
	[µS/cm]	50	100
<b>Brechungsindex / Refractive index</b>			
		1.58	1.58
<b>Härteindex (Mohs) / Mohs hardness</b>			
		3	3
<b>Dichte / Density</b>			
	[g/cm <sup>3</sup> ]	2.4	2.4

**Produktvorteile / Product properties**

- **Sehr hohe Partikelfeinheit**  
*Ultra fine particles*
- **Sehr enge Kornverteilung**  
*Very narrow grain size distribution*
- **Plättchenförmige Partikelmorphologie**  
*Platy like morphology*
- **Hohe spezifische Oberfläche**  
*High specific surface area*



## Beispiele für den Einsatz von APYPAL 60D, APYPAL 120E / Examples for the use of APYPAL 60D, APYPAL 120E



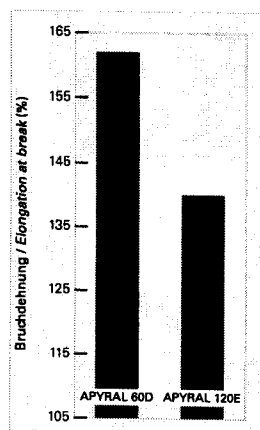
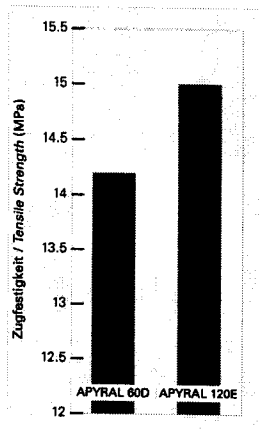
Halogenfrei flammgeschützte Kabel  
Halogen free flame retardant cables



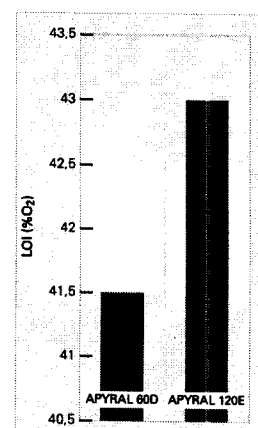
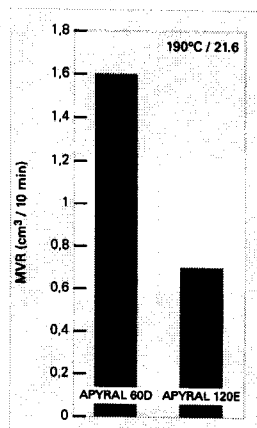
Rauchgasreduzierter Thermoisolationsschaum  
Smoke suppressed thermoinsulation foam

## Produkt- / Product-Information

Mechanische Eigenschaften eines HFFR-EVA Kabelcompound  
Mechanical Properties of an HFFR-EVA cable compound



Schmelzeindex MVR und LOI eines HFFR-EVA Kabelcompounds  
Melt Volume Rate and LOI of an HFFR-EVA cable compound



For further information, please contact:

**Nabaltec AG**  
P. O. Box 1860 · D-92409 Schwandorf  
Phone +49(0) 94 31 53 - 0  
Fax +49(0) 94 31 615 57  
www.nabaltec.de

### Business Unit Flame Retardants

Phone +49(0) 94 31 53-4 62/4 58/4 67  
fillers@nabaltec.de

All data listed in this brochure are reference values and subject to production tolerances. These values are exclusive to the product description and no guarantee is placed on the properties. It remains the responsibility of the users to test the suitability of the product for their application.



**APYRAL®**

## Produkt- / Product-Information

### APYRAL 20X, APYRAL 30X

**Nabaltec**

Mineralische Flammenschutzmittel für  
Mineral flame retardants for

- Bauindustrie / Construction industry
- Fahrzeugbau / Public transport
- Elektro-/Elektronikindustrie / Electronic industry

**APYRAL®**

Durchschnittsanalyse / Typical analysis		APYRAL 20X	APYRAL 30X
Al (OH) <sub>3</sub> - Gehalt / -Content	[%]	99.7	99.7
Feuchte / Moisture	[%]	0.1	0.1
Glühverlust / Loss on ignition	[%]	34.6	34.6
Teilchengröße / Particle size			
(Laserbeugung) / (Laser diffraction)			
	D <sub>10</sub> [µm]	0.5	0.5
	D <sub>50</sub> [µm]	8	7
	D <sub>90</sub> [µm]	80	45
Siebrückstand / Sieve analysis			
(> 45 µm)			
	[%]	35	10
Spezifische Oberfläche / Specific surface area			
(BET)			
	[m <sup>2</sup> /g]	1.2	1.5
Schüttdichte / Bulk density			
	[kg/m <sup>3</sup> ]	550	500
Ölaufnahme / Oil absorption			
	[ml/100g]	12	13
Weißgrad / Whiteness			
(Elrepho 457 nm)			
	[%]	90	94
Spezifische Leitfähigkeit / Specific conductivity			
	[µS/cm]	50	50
Brechungsindex / Refractive index			
		1.58	1.58
Härteindex (Mohs) / Mohs hardness			
		3	3
Dichte / Density			
	[g/cm <sup>3</sup> ]	2.4	2.4

### Produktvorteile / Product properties

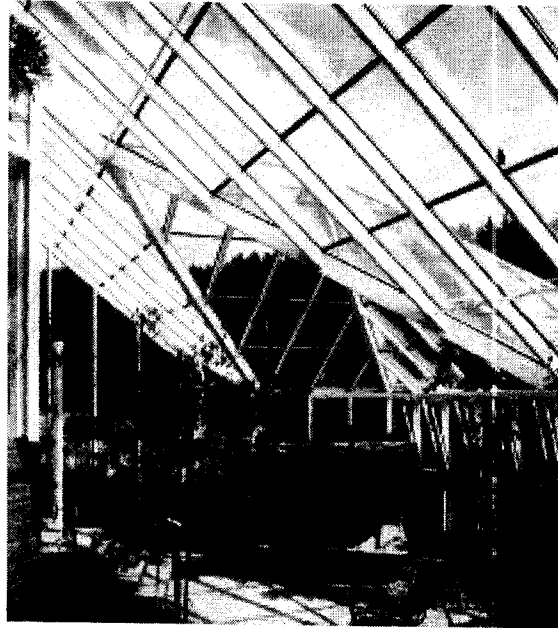
- Bimodale Kornverteilung  
Bimodal grain size distribution
- Extrem niedrige Viskosität  
Extremely low viscosity
- Extrem hohe Füllgrade  
Extremely high filling levels
- Optimierte Topfzeiten  
Optimised pot life



## Beispiele für den Einsatz von APYRAL 20X, APYRAL 30X / Examples for the use of APYRAL 20X, APYRAL 30X



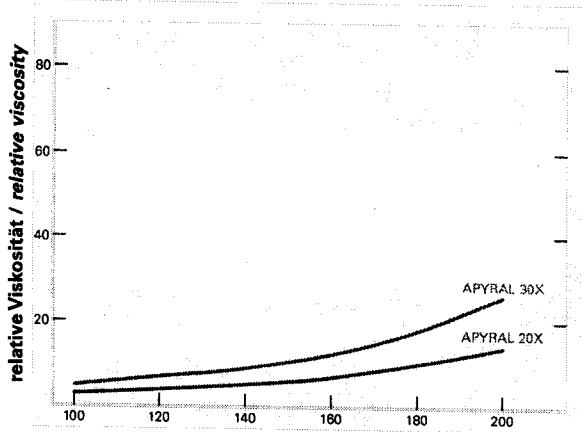
Innenausstattung Schienenfahrzeuge  
Interiors for railway cars



Profile im Objektbau / Constructions profiles

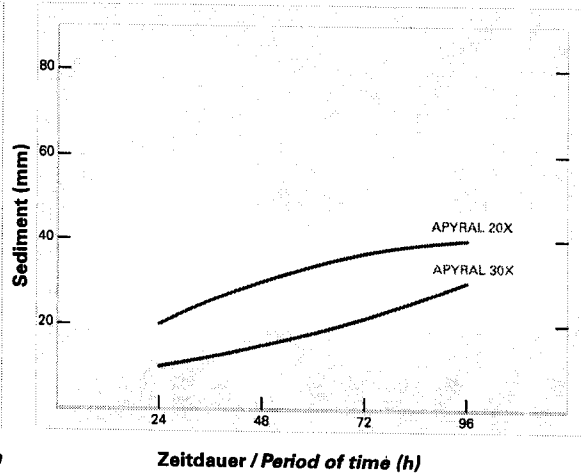
## Produkt-/Product-Information

Viskositätsverhalten in UP-Harz Palapreg P17  
Viscosity behaviour in UP-resin Palapreg P17



Teile ATH auf 100 Teile Harz / Parts of ATH in 100 parts of resin

Absetzverhalten in UP-Harz Palapreg P80 (Füllgrad 50%)  
Settling behaviour in UP-resin Palapreg P80 (Filling level 50%)



Zeitdauer / Period of time (h)

For further information, please contact:

**Nabaltec AG**  
P. O. Box 1860 · D-92409 Schwandorf  
Phone +49(0) 94 31 53 - 0  
Fax +49(0) 94 31 615 57  
www.nabaltec.de

### Business Unit Flame Retardants

Phone +49(0) 94 31 53-4 62/4 58/4 67  
fillers@nabaltec.de

All data listed in this brochure are reference values and subject to production tolerances. These values are exclusive to the product description and no guarantee is placed on the properties. It remains the responsibility of the users to test the suitability of the product for their application.

## EXHIBIT 3

Contact | Service | Sitemap

☐ Search Technical Datasheet

☐ Search site

Sustainability >> [Sustainable chemistry by division](#) >>

☐ e-mail ☒ print

## Huntsman Materials & Effects - Advanced Materials

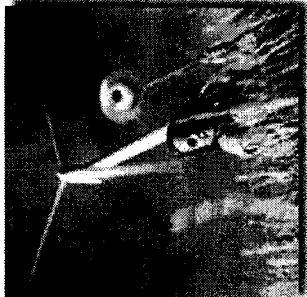
**Power and Electronics.** In their cured state, Huntsman's environmentally friendly epoxy products replace liquid insulation systems based on mineral oil. For example, our products permit the use of cast resin transformers instead of oil-filled transformers in windmills, and fully encapsulated vacuum switchgears instead of oil- or SF6 (a suspected greenhouse gas) insulated products.

Huntsman is in the process of developing a new binder formulation for use in bi-polar plates that comprise fuel cells for automotive and military vehicles, based on Huntsman's patented AZYRAL® halogen-free resin chemistries. Huntsman anticipates the new binder will work in synergy with the physical performance capabilities of natural graphite and the efficient, economical manufacturing processes to produce fuel cells that will power pollution-free cars of the future.

**Aerospace.** Products include a new range of adhesive products specifically designed and qualified to support next generation aviation repair, maintenance and overhaul requirements and non-brominated, flame-retardant adhesive products.

**Electronics** include PROBIMER® 77 (aqueous developable) and PROBIMER® 65 (solvent developable) solder masks which offer systems that are halogen-free, optimized for lead-free soldering and conform with latest Restriction of Hazardous Substances (RoHS) standards. Other environmentally friendly products include: LED epoxy encapsulants, PROBELEC® liquid dielectrics and AZYRAL® high performance laminating systems.

**Stereolithography.** Huntsman has developed SL7800, a clear general purpose resin specially suited for foundry application, to be antimony free.



**Sustainable chemistry by division**

Environment, health & safety

Media center

Showcase

Contacts

Join our mailing list

**World Headquarters**

500 Huntsman Way  
Salt Lake City  
Utah 84108  
USA

Tel.: +1-801-584-5700

**Administrative Headquarters**

10003 Woodloch Forest Drive  
The Woodlands  
Texas 77380  
USA

Tel.: +1-281-719-6000

Contact | Service | Site map

search

☐ Search Technical Datasheet

☐ Search site

About us

Markets

Innovation

Careers

Customer Service

Home >> Electronics >>

e-mail print

## Advanced Materials launches Azyral®

'Green' solutions for high performance laminates

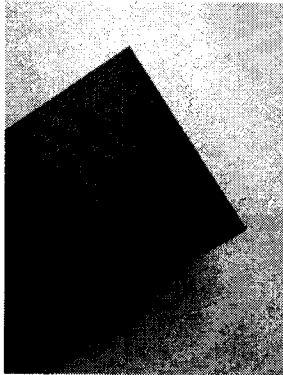
Azyral® laminating resin systems from Advanced Materials respond to the market expectation for 'green' solutions in Electronics. These systems have been optimized to help protect the environment while meeting today's needs for advanced performance.

*"The product characteristics of the patented Azyral® systems exceed those of conventional laminates in many aspects and open up new possibilities for the build-up of printed circuit boards," says Harald Wiedemann, global marketing director, Huntsman Advanced Materials.*

Product properties include:

- halogen-free technology
- high thermal resistance
- compatibility with lead-free soldering
- low dissipation factor for high frequencies
- low dielectric constant for high-speed applications
- FR4 process compatibility
- UL 94 V-0 passed

Contact your local sales representative or fill in the [contact form](#) for more information.



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Huntsman Advanced Materials  
Klybeckstrasse 200  
Basel 4057  
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News

16 Oct 2006

Huntsman Introduces Halogen-Free Laminating Resins for Printed Circuit Boards

FOR IMMEDIATE RELEASE

CONTACT:

Kathy Avery  
Avery Communications  
770-509-6801

-or-

Maria Pate  
Huntsman Advanced Materials  
281-719-7400

HUNTSMAN INTRODUCES HALOGEN-FREE  
LAMINATING RESINS FOR PRINTED CIRCUIT BOARDS

THE WOODLANDS, Texas, October 16, 2006 – Huntsman Advanced Materials has introduced two halogen-free laminating resins that comply with the most recent regulatory requirements for printed circuit board manufacturing. **AZYRAL®** one- and two-component laminating systems combine versatile processing capabilities with good electrical characteristics and an innovative combination of physical properties. As a result, multilayer printed circuit boards and other electrical components fabricated with new **AZYRAL** laminating materials can withstand exposure to extremely tough operating conditions.

Processing. Halogen-free **AZYRAL** XU8282-1 resin is RoHS compliant and suitable for use with lead-free soldering operations. Both **AZYRAL** XU8282-1 and two-component **AZYRAL** XTW8291/XTW8293 laminating systems feature easy-to-process, low viscosities for use with FR4 processing. They are nondicy-curing products and meet the requirements of UL 94 V-O specifications.

Electrical Characteristics. One- and two-component **AZYRAL** materials produce printed circuit boards with a low dielectric constant, low dissipation factor, good surface resistivity and good volume resistivity.

Performance Properties. **AZYRAL** resins are high-temperature resistant materials with low moisture absorption, good thermal stability with glass transition temperatures in the 320-482°F (160-250°C) range, low coefficient of thermal expansion and low shrinkage.

For more information about the new **AZYRAL** halogen-free laminating resins, please contact Customer Service by calling 888-564-9318 or e-mail: [electronics@huntsman.com](mailto:electronics@huntsman.com).  
\* **AZYRAL** is a registered trademark of Huntsman Corporation or an affiliate thereof in one or more, but not all, countries.

Huntsman is a global manufacturer and marketer of differentiated and commodity chemicals. Its operating companies manufacture products for a variety of global industries including chemicals, plastics, automotive, aviation, textiles, footwear, paints and coatings, construction, technology, agriculture, health care, detergent, personal care, furniture, appliances and packaging. Originally known for pioneering innovations in packaging and, later, rapid and integrated growth in petrochemicals, Huntsman today has 15,000 employees and 78 operations in 24 countries. The Company had 2005 revenues of \$13 billion.

*Statements in this release that are not historical are forward-looking statements. These statements are based on management's current beliefs and expectations. The forward-looking statements in this release are subject to uncertainty and changes in circumstances and involve risks and uncertainties that may affect the company's operations, markets, products, services, prices and other factors as discussed in the Huntsman companies' filings with the Securities and Exchange Commission. Significant risks and uncertainties may relate to, but are not limited to, financial, economic, competitive, environmental, political, legal, regulatory and technological factors. Accordingly, there can be no assurance that the company's expectations will be realized. The company assumes no obligation to provide revisions to any forward-looking statements should circumstances change, except as otherwise required by securities and other applicable laws.*

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